Wetland and Waterbody Delineation

PORT OF EAST ST. LOUIS EAST ST. LOUIS, ILLINOIS

October 2013

Prepared for:

TERRA ENGINEEIRNG, LTD.

SCI No. 2013-3194.30

October 4, 2013

Mr. George Ghareeb Terra Engineering, Ltd. 401 N. Main Street, Suite 1130 Peoria, Illinois 61602

RE: Wetland and Waterbody Delineation

> Port of East St. Louis East St. Louis, Illinois SCI No. 2013-3194.30

Dear Mr. Ghareeb:

We are pleased to submit our report entitled Wetland and Waterbody Delineation - PORT OF EAST ST. LOUIS - EAST ST. LOUIS, ILLINOIS, dated October 2013. Our field investigation identified three emergent wetlands, a swale, and a roadside ditch within and adjacent to the project boundaries. As described in our September 13, 2013 proposal, our field investigation focused on the areas that were suspect for wetland characteristics within and adjacent to the project site boundary since the project site is located within the Mississippi River 100-year floodplain. The wetlands identified by SCI may be considered waters of the United States as stated under the definitions described in Section 328.3 of the Code of Federal Regulations (33 CFR). Any impact to waters of the United States, including draining, filling, piping, rerouting, crossing, and discharging into, will require a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA). However, the USACE has the sole authority to determine if any of the features we identified would be under their jurisdiction. SCI is available to assist with the Section 404 and Section 401 Permit application as you advance in your planning of the project.

If you have any questions or concerns, please contact Scott Harding at (618) 206-3041 or sharding@sciengineering.com.

Respectfully,

SCI ENGINEERING, INC.

Wetland Scientist

Vice President

MMG/SDH/tlw

Enclosure

One copy and one electronic version submitted.

\\scieng\shared\OFallon\emtapps\PROJECT FILES\!2013 Projects\2013-3194 Port of East St. Louis\NR\30\City of East St. Louis\20133194.30 Wetland Delineation Report - FINAL.doc

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE LOCATION	1
3.0	SOIL SURVEY AND TOPOGRAPHIC RESEARCH	2
4.0	SITE RECONNAISSANCE AND CONDITION SUMMARY	2
5.0	CONCLUSION	4
6.0	LIMITATION	4

FIGURES

Figure 1 – Vicinity and Topographic Map

Figure 2 – National Wetlands Inventory Map

Figure 3 – Wetland Delineation and Aerial Photograph

APPENDICES

Appendix A – Photographic Summary

Appendix B – Wetland Determination Data Forms – Midwest Region

Wetland and Waterbody Delineation

PORT OF EAST ST. LOUIS EAST ST. LOUIS, ILLINOIS

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by Mr. George Ghareeb of Terra Engineering, Ltd. to conduct a wetland delineation on the referenced site. The scope of the study included performing site reconnaissance to characterize the soils, vegetation, and hydrology for delineation of wetlands and waterbodies. Our services were provided in general accordance with our proposal dated September 13, 2013.

The project site is approximately 13.5 acres. In May/June, 2012, an SCI Wetland Scientist performed a field investigation of the northern portion of the project site to delineate the extent of existing waterbodies and wetlands within and adjacent to the northern project limits as noted in Figure 3. No wetlands were identified within the northern portion of the project site. On September 18, 2013, an SCI Wetland Scientist performed a field investigation of the southern portion of the project site to delineate the extent of existing waterbodies and wetlands within and adjacent to the southern project limits also noted in Figure 3. Within and adjacent to the southern portion of the project site, there are three emergent wetland areas totaling approximately 3.1 acres, a swale, and a roadside ditch totaling approximately 0.6 acres. Based on their physical characteristics and proximity to the Mississippi River, these areas could be considered waters of the United States as identified under the definitions described in Section 328.3 of the Code of Federal Regulations (33CFR). Any impact to waters of the United States, including draining, filling, piping, rerouting, crossing, and discharging into will require a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA).

2.0 SITE LOCATION

The project site is located north of Monsanto Avenue and west of IL Route 3 just south of Interstates 55/70/64 and the Poplar Street Bridge convergence in East St. Louis, St. Clair County, Illinois. There is a defunct water treatment facility west of the project limits that is noted in the NWI database as a palustrine, unconsolidated bottom, intermittently exposed, excavated (PUBGx) wetland; however, this water treatment facility is outside the project limits and will not be impacted. The project area is an approximately 75-foot to a 250-foot wide corridor that runs north on the west side of IL Route 3 then turns west along an elevated railroad line to the Metro-East Sanitary District levee. The proposed project will consist of construction of an access road to serve the future Port of East St. Louis, starting from

IL Route 3 on the southern portion of the property and running north then west along an elevated rail line through the project site (Figure 3). Adjacent properties are a mix of undeveloped areas and entertainment/commercial/industrial uses. All project development will be within Section 23, Township 2 North, Range 10 West. The *Vicinity and Topographic Map* is enclosed as Figure 1.

3.0 SOIL SURVEY AND TOPOGRAPHIC RESEARCH

According to the Web Soil Survey (WSS), prepared by the Natural Resources Conservation Service (NRCS), the project site is mapped as Urban Land (533) soil type. This soil type is not listed as a hydric soil on the *NRCS National Hydric Soils List: Hydric Soils of the United States* or the St. Clair County Hydric Soils List. The project site is located within the Mississippi River 100-year floodplain.

A U.S. Geological Survey (USGS) Topographic Map and National Wetlands Inventory (NWI) map were reviewed for information concerning the project site. The USGS map is a reproduction of a portion of the USGS topographic map for the *Granite City, Illinois-Missouri* quadrangle dated 1993 (photo-revised 1998) and the *Cahokia, Illinois-Missouri* quadrangle, dated 1993 (photo-revised 1998). Copies of the USGS topographic and NWI maps are enclosed as Figures 1 and 2, respectively. According to these maps, the topography of the project site is relatively level and drains toward the north-northwest. These maps indicate the presence of two large palustrine, emergent, seasonally flooded (PEMC) wetland areas within the southern portion of the project site. Surface topography observed on the date of the field investigation appeared to generally coincide with the topography depicted on the USGS map. It was evident that the majority of the project site has been previously disturbed from historical construction of IL Route 3, highways to the north and commercial/industrial development surrounding the project site. In addition, gravel fill has been placed for an access road that bisects the project site going east-west in the southern portion of the project site near the row of warehouses; however, the gravel road does not extend the full width of the property. This gravel road has three pipe culverts that allow water movement from south to north through wetlands as discussed below and noted in Figure 3.

4.0 SITE RECONNAISSANCE AND CONDITION SUMMARY

Since the site is located east of the Mississippi River and within the 100-year floodplain and based on historical topographic maps and the NWI maps, suspect areas on the site were explored for wetland and waterbody characteristics. A photographic summary of the representative site conditions is included as Appendix A. Included in Appendix B are the *Wetland Determination Data Forms - Midwest Region* for the suspect wetland areas. The conditions summarized below are mapped on the *Wetland Delineation and Aerial Photograph*, enclosed as Figure 3.

Our site investigation confirmed the presence of the suspected wetlands noted in the NWI database and topographic maps. These two large wetland areas further delineate down into three smaller connected emergent wetlands. In addition to these three emergent wetlands, a swale was identified that drains into one of the wetlands and a roadside ditch was also identified along IL Route 3 (Figure 3).

The roadside ditch runs along IL Route 3 and flows north. The upland slopes of the ditch are fill material from historical construction of IL Route 3 and from the entrance road to the water treatment facility to the northwest. The roadside ditch is approximately 0.6 acres and is entirely within the project boundary limits. Vegetation consists of nearly 100 percent of *Typha angustifolia (narrow-leaf cattail)*. Hydrology is provided by the naturally occurring high water table and by stormwater runoff. The roadside ditch supported evidence of hydrologic indicators, hydrophytic vegetation and hydric soils. The roadside ditch did not appear to be mowed during the 2013 growing season. It is very common for this ditch to overflow and cause flooding at the intersection of IL Route 3 and Mississippi Avenue stoplight.

Wetlands A, B, and C make up the two large areas identified in the NWI database. Wetland A is approximately 0.3 acres and is outside the project boundary limits. Wetland B is approximately 0.5 acres and is also outside the project boundary limits. However, Wetland A drains into Wetland B via a pipe culvert. Then, Wetland B drains into the larger Wetland C via a swale. Wetland C is approximately 2.4 acres total with 2.0 acres within the project boundary limits. Freshwater snails were observed in Wetland C. The swale begins off site at the southern end of the project limits and then drains north into Wetland C on site via a pipe culvert. Wetlands A, B, and C and the swale all supported various wetland vegetation which consisted of: *Typha angustifolia* (narrow-leaf cattail), *Asclepias incarnata* (swamp milkweed), *Carex alopecoidea* (fox-tail sedge) and *Salix nigra* (black willow). Site hydrology is provided by the naturally occurring high water table and by adjacent stormwater runoff. Although it was evident that the Wetland A, B, and C areas have been mowed during the 2013 growing season, all delineated areas clearly supported evidence of hydrophytic vegetation, hydrologic indicators and hydric soils (Appendix B). The roadside ditch had not been mowed. Wetlands A, B, and C are all connected to each other.

In May/June 2012 SCI conducted a wetland delineation on the northern portion of the project site. Five data points collected then showed no wetlands, only uplands within this northern portion of the project site. This portion of the project site begins near the water treatment facility, runs north then turns west along an elevated rail line (Figure 3). The 2012 wetland determination data forms for these five data points are also included in Appendix B.

5.0 CONCLUSION

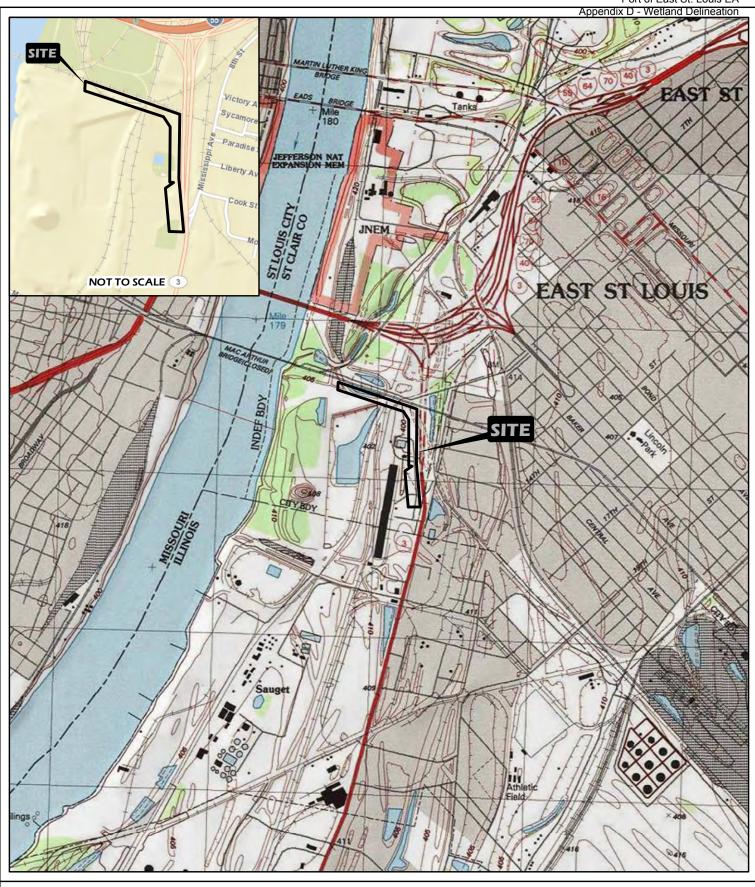
Based on our May/June 2012 and September 2013 field investigation, SCI confirmed the presence of the suspected wetlands noted in the NWI database and topographic maps in the southern portion of the project site. These two large wetland areas further delineate down into three smaller connected emergent wetlands. These three wetlands could be considered under the jurisdiction of the USACE due to their location within the 100-year floodplain and that they meet all three wetland determination criteria. In addition to these three emergent wetland areas, a swale and a roadside ditch were also identified. No wetlands were identified within the northern portion of the project site. If any identified areas are determined to be under the jurisdiction of the USACE, a permit would be required before development can occur. The USACE has the sole authority to determine if any of the features identified would be under their jurisdiction.

The USACE requires a Section 404 Permit for the development of a site that impacts jurisdictional waterbodies. Likewise, a Section 401 Water Quality Certification from the IEPA is typically required for a project that requires a Section 404 Permit. The USACE generally requires a preliminary development plan along with an impact assessment before issuing any formal authorization regarding a permit. We are available to assist you with satisfying the requirements of the USACE and/or IEPA as you advance in your planning for this development.

6.0 LIMITATION

This report has been prepared for the exclusive use of Terra Engineering. SCI is not responsible for independent conclusions or recommendations made by others. Furthermore, written consent must be provided by SCI should anyone other than our client wish to excerpt, or rely on the contents of this report. The findings of this report are valid as of the present date of the delineation. SCI is not responsible for surveys, calculations, or plans that were prepared by others.

Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control.





PROJECT NAME

PORT OF EAST SAINT LOUIS EAST SAINT LOUIS, ILLINOIS

VICINITY AND TOPOGRAPHIC MAP

JOB NUMBER DRAWN BY DATE CHECKED BY MMG 10/2013 2013-3194.30

GENERAL NOTES/LEGEND

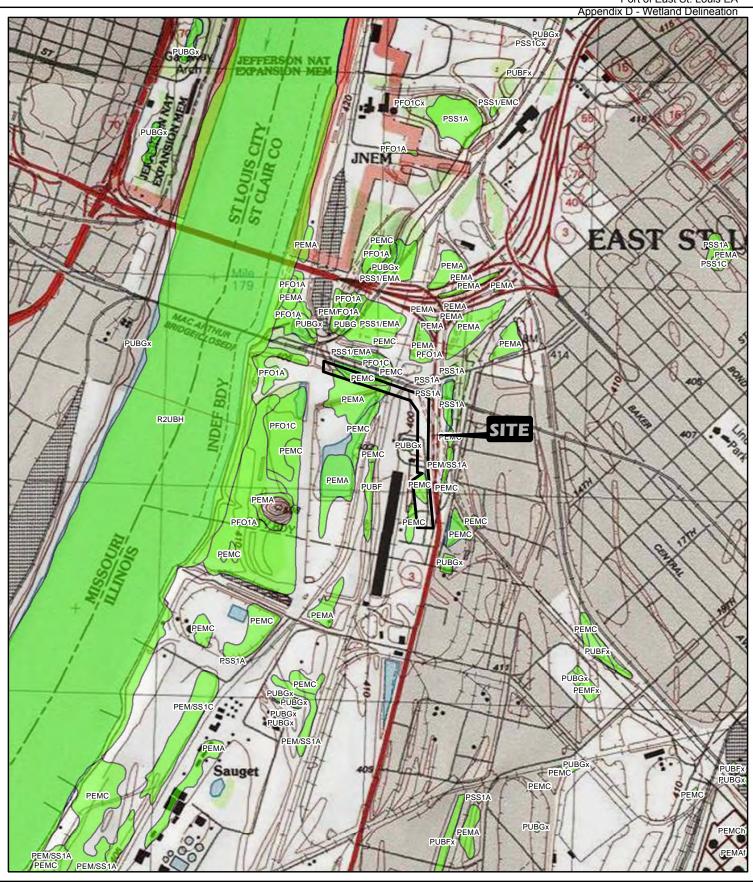
USGS TOPOGRAPHIC MAP CAHOKIA, ILLINOIS QUADRANGLE DATED 1998 10' CONTOURS



SCALE 1'' = 2000'

FIGURE

Port of East St. Louis EA





PROJECT NAME

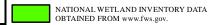
PORT OF EAST SAINT LOUIS EAST SAINT LOUIS, ILLINOIS

NATIONAL WETLAND INVENTORY MAP

 DRAWN BY
 RCV
 DATE
 JOB NUMBER

 CHECKED BY
 MMG
 10/2013
 2013-3194.30

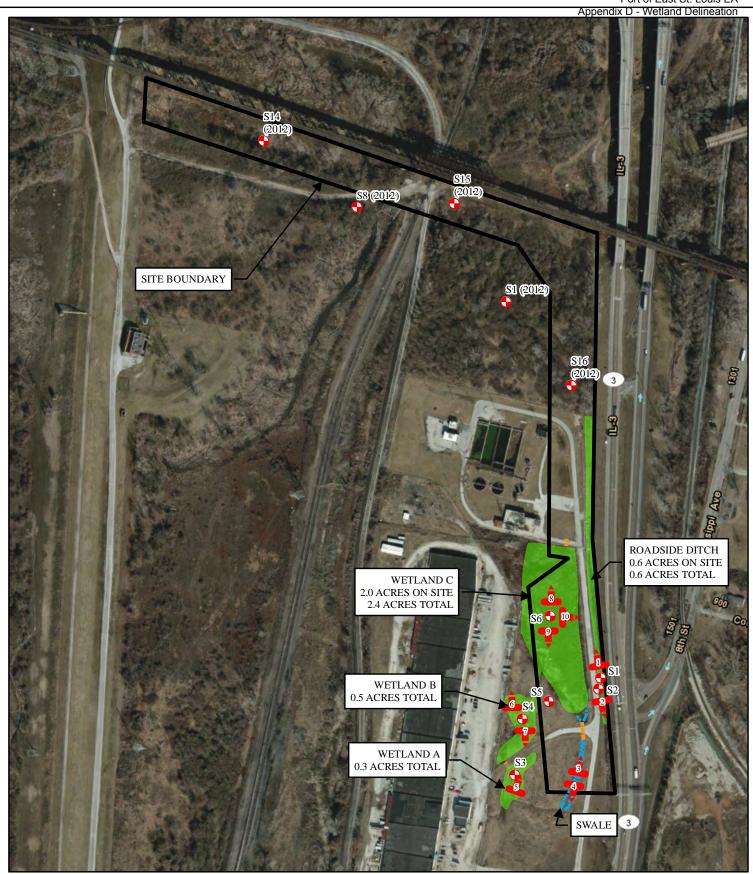
GENERAL NOTES/LEGEND



USGS TOPOGRAPHIC MAP CAHOKIA, ILLINOIS QUADRANGLE DATED 1998 10' CONTOURS



FIGURE 2.





PROJECT NAME

PORT OF EAST SAINT LOUIS EAST SAINT LOUIS, ILLINOIS

WETLAND DELINEATION AND AERIAL PHOTOGRAPH

 DRAWN BY
 RCV
 DATE
 JOB NUMBER

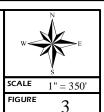
 CHECKED BY
 MMG
 10/2013
 2013-3194.30

GENERAL NOTES/LEGEND

INDICATES APPROXIMATE SOIL BORING LOCATION INDICATES APPROXIMATE CULVERT LOCATION

INDICATES APPROXIMATE LOCATION AND DIRECTION

OF PHOTOGRAPH
AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE.
DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY.
DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT
FOR WHICH IT WAS GENERATED.



Appendix A



Photo 1. Roadside ditch at S1 facing north



Photo 2. Roadside ditch at S1 facing south



Photo 3. Center of swale, facing north



Photo 4. Center of swale, facing south



Photo 5. Wetland 1 at S3 facing north



Photo 6. Wetland 2 at S4 facing north from center



Photo 7. Wetland 2 at S4 facing south from center



Photo 8. Wetland 3 at S6 facing north from center



Photo 9. Wetland 3 at S6 facing south from center



Photo 10. Wetland 3 at S6 facing east from center

Appendix B

	WI	ETLAND I	DETERM	[NAT]	ION	DATA	F(ORM – Mi	dwest Re	gion			
Project/Site:	Port of Eas	st St. Louis	City/C	ounty:	Eas	st St. Lou	is; S	t. Clair	Sampling	g Date:	05-08-2	2012	
Applicant/Owner:	Slay Indus	stires	State:		Illin	nois			Sampling	g Point:	<u>S1</u>		
Investigator(s):	SCI Engin	eering, Inc.			Sec	ction, To	wnsh	ip, Range:		S23 T2N	1 R10W		
Landform (hillslope, te	errace, etc.):				Loc	cal relief	(con	cave, convex,	none):				
Slope (%):		I	at:	_	I	Long:			Datum:		1		
Soil Map Unit Name:			l .		NW	VI classif	icatio	on:					
Are climatic/hydrologi	c conditions of	on the site typi	ical for this ti	me of y	ear?			Yes 🛛 No	o [] (If no,	explain ir	n Remarks	.)	
Are Vegetation N, Soil	Y, or Hydrol	logy <u>N</u> signific	cantly disturb	ed?		A	Are "	Normal Circu	mstances" p	resent?	Yes 🛛	No 🗌	
Are Vegetation N, Soil			-			(If ne	eded, explain	any answers	in Rema	rks.)		
						<u> </u>							
SUMMARY OF F		ī		owing	g san	npling	poi	nt location	s, transec	ets, imp	ortant f	eatures, etc.	
Hydrophytic Vegetation	n Present:		To 🛛			In 41-	Co	nlad Aws-					
Hydric Soil Present:		Yes N	lo 🛛					pled Area /etland?	Yes □ No ⊠				
Wetland Hydrology Pre	esent:	Yes N	lo 🛛										
Remarks: Area of fill.													
VEGETATION – 1	Use scienti	fic names	of plants.										
			F			. .			.				
Tree Stratum (Plot size	e:)			Abso % Co		Domin Specie		Indicator Status	Dominano	ce Test wo	orksheet:		
1								Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)					
2				-					that are Ol	BL, FACV	V, or FAC	: <u>1</u> (A)	
3									Total Num Species ac			3 (B)	
4 5.									Percent of				
J					= T	otal Cov	er		that are Ol			: <u>33</u> (A/B)	
Sapling/Shrub Stratum	(Plot size:)			_				Prevalenc	e Index V	Vorkshee	t:	
1. <u>Lonicera maackii</u>				50		X		NI	Total % C	over of:		Multiply by:	
2				1					OBL speci			x1 =	
3				-					FACW sp		_	x2 =	
4 5.				1					FAC speci			$x3 = \underline{270}$	
J				50 -	Total	Cover		1	FACU speci			$x4 = \underline{120}$ $x5 = \underline{\hspace{1cm}}$	
Herb Stratum (Plot size	e:)			<u> 50</u> –	ıotal	20101			Column T			390 (B)	
1. Sorghum halepense	/			25		X		FACU	Prevalence			` '	
2. <u>Rumex crispus</u>	15				FAC	Hydrophy							
3. Galium aparine				5				FACU	Doi	minance T	Cest is >50	%	
4. <u>Asclepias syriaca</u>				10				NI			ndex is ≤3.		
5. poa pratensis				75		X		FAC				ions ¹ (Provide on a separate	
	<u>130</u> =	30 = Total Cover				sheet)	, uata III K	emarks of	оп а ѕерагате				
Woody Vine Stratum (Plot size:)							Pro (Explain)	blematic I	Hydrophyt	ic Vegetation1	
1				1					•	of hydric	soil and v	wetland hydrology	
2						must be problemat	esent, unl						

= Total Cover

Remarks: (Include photo numbers here or on a separate sheet.)

Hydrophytic Vegetation Present? Yes 🗌 No 🛛

SOIL Sampling Point: <u>S1</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)													
Depth	Matrix				edox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks				
	, ,		, ,		J I								
¹Type: C=Con	centration D=De	nletion RI	M=Reduced Matrix	CS=Cov	ered or Coated Sand	Grains 2La	ocation:	PL=Pore Lining	M=Matrix				
Hydric Soil I		pretton, re	· · · · · · · · · · · · · · · · · · ·	05 00.	orea or course suite			Problematic Hyo					
☐ Histosol (A			☐ Sandy G	leved Ma	trix (S4)			ie Redox (A16)					
☐ Histic Epic			☐ Sandy R	•				nese Masses (F12	2)				
☐ Black Hist			☐ Stripped				_	lain in Remarks)	-,				
Hydrogen			Loamy N				(—··r	,					
☐ Stratified I			Loamy C	-									
2 cm Mucl	-		☐ Depleted										
	Selow Dark Surfac	ce (A11)	☐ Redox D			³ Indica	tors of h	vdrophytic vegeta	ation and wetland				
_	Surface (A12)	()	☐ Depleted		` '	hydrolo	ogy mus	t be present, unles	ss disturbed or				
	cky Mineral (S1)		☐ Redox D			problei	natic.						
-	xy Peat or Peat (S	3)	_	1	,								
	yer (if observed												
Type:		,											
• •	Depth (inches): Hydric Soil Present? Yes \[\subseteq No \[\subseteq \]												
•	Remarks: Soil too rocky for soil sample (fill soils)												
			,										
HYDROLO	GY												
Watland Hyd	rology Indicator	e•											
•			quired; check all tha	t annly)			Second	dary Indicators (m	ninimum of two required)				
☐ Surface W		1 One 13 rec	-		Leaves (B9)			rface Soil Cracks	•				
☐ High Wate	` ′		☐ Aquati				_	ainage Patterns (E	` '				
☐ Saturation			_		ants (B14)			y-Season Water T					
☐ Water Mar	` '			-	de Odor (C1)			ayfish Burrows (C					
☐ Sediment I			-	-	spheres on Living Ro	oots (C3)		-	n Aerial Imagery (C9)				
☐ Drift Depo					uced Iron (C4)	(,		inted or Stressed I					
☐ Algal Mat					luction in Tilled Soil	s (C6)		.C-Neutral Test (I					
☐ Iron Depos			☐ Thin N			, ,		`	,				
_	Visible on Aerial	l Imagery (
	egetated Concave		_		n Remarks)								
	Field Observations:												
Surface Water	Present? Ye	es 🔲 No	Depth (inche	es): None									
Water Table P			Depth (inche										
Saturation Pre			Depth (inche		Wetland Hy	drology Pr	esent?	Yes 🗌	No 🛛				
(includes capil		_	_	, <u>—</u>									
fringe)													
Describe Reco	rded Data (strean	n gauge, m	onitoring well, aeria	al photos,	previous inspections	s), if availab	le:						
Remarks:													

	WE	TLAN	D DET	ERMI	NATI	ON	DAT	A F	O	RM – Mi	dwest	Reg	gion		
Project/Site:	Port of Eas	t St. Loui	s	City/Co	unty:	Eas	st St. Lo	uis;	St.	Clair	Sam	pling	Date:	05-0	08-2012
Applicant/Owner:	Slay Indust	tires		State:		Illi	nois				Sam	pling	Point:	<u>S8</u>	
Investigator(s):	SCI Engine	eering, In	<u>c.</u>			Sec	ction, To	owns	ship	p, Range:			S23 T2N	R10W	7
Landform (hillslope, ter	race, etc.):									ave, convex,	none):				
Slope (%):			Lat:]	Long:				Datı	ım:			
Soil Map Unit Name:			1				VI classi	ifica	tion	n:					
Are climatic/hydrologic	conditions of	n the site	typical f	or this tim	ne of ve				1			f no. o	explain in	Rema	rks.)
Are Vegetation <u>Y</u> , Soil								Are		Jormal Circu				Yes	
Are Vegetation N, Soil											any answers in Remarks.)				
SUMMARY OF FI						car									t features etc
					wing	, sai	Прине	, po	,111	t location	5, ti ai	iscc	is, impe	n tan	t icatures, etc.
Hydrophytic Vegetation	Present:	Yes	No 🛚				Is the	Sar	mnl	led Area					
Hydric Soil Present:		Yes	No 🛚							tland?	Yes □ No ⊠				
Wetland Hydrology Pres	sent:	Yes 🗌	No 🛚												
Remarks: Fill area.															
		•													
VEGETATION – U	se scientif	nc nam	es of p	lants.											
Tree Stratum (Plot size:)				Abso % Co		Domi Speci		t	Indicator Status	Domi	nanc	e Test wo	rkshe	et:
1													Dominan L, FACW		
2															_ ` '
3 4													oer of Dor oss all Str		<u>2</u> (B)
5											Percei	nt of l	Dominant	Speci	es
						_ = T	otal Co	ver			Percent of Dominant Species that are OBL, FACW, or FAC: 50 (A/B)				
Sapling/Shrub Stratum	(Plot size:)									Preva	lence	Index W	Vorksh	neet:
1. <u>Lonicera maackii</u>					50		X			NI			ver of:		Multiply by:
2													es		x1 =
3												_	cies	=	x2 =
4							-		-			_	es <u>90</u>		x3 = 270
5													eies <u>30</u>		x4 = 120
Horb Stratum (Dist -:	. \				<u>50</u> =	Total	Cover					-	tola: 120		
Herb Stratum (Plot size 1. <i>Sorghum halepense</i>)				25					FACU			tals: <u>120</u> Index = F		390 (B)
2. Rumex crispus					15					FAC				_	indicators:
3. Galium aparine					5					FACU	•		inance To		
4. Asclepias syriaca										NI			alence Inc		
5. <u>poa pratensis</u>							X			FAC		Mor	phologica	ıl Adaj	otations1 (Provide
						Tota	al Cove	r			suppo sheet)	_	data in Re	emarks	s or on a separate
Woody Vine Stratum (F	Plot size:	_)									(Expl		lematic F	Iydrop	hytic Vegetation1
1 2.													of hydric sent, unle		nd wetland hydrolo Turbed or
۷٠									problematic.						
					= Total Cover					Hydrophytic Yes ☐ No [Vegetation Present?				Yes ☐ No ☒	

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: <u>S8</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)													
Depth	Matrix	•			edox Features			ĺ					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks				
	0 0000 (000000)	,,,	2 3 3 3 (,,,	- 7 - 7				211111111111111111111111111111111111111				
¹Type: C=Con	centration. D=De	pletion, RI	M=Reduced Matri	x. CS=Cov	ered or Coated Sand	Grains. ² Lo	ocation:	PL=Pore Lining.	M=Matrix				
Hydric Soil I		pretton, re		., 05 001	orea or course suma			Problematic Hyo					
☐ Histosol (A			☐ Sandy ©	Gleved Ma	trix (S4)			ie Redox (A16)					
☐ Histic Epic				•				nese Masses (F12	2)				
☐ Black Hist			☐ Strippe				_	lain in Remarks)	,				
☐ Hydrogen			Loamy				1						
☐ Stratified I			☐ Loamy	-									
2 cm Mucl	-		☐ Deplete	-									
Depleted E	Below Dark Surface	ce (A11)	Redox			³ Indica	tors of h	ydrophytic vegeta	ation and wetland				
-	Surface (A12)	, ,	☐ Deplete	d Dark Su	rface (F7)	hydrole	ogy mus	t be present, unles					
☐ Sandy Mu	cky Mineral (S1)		Redox			problei	natic.						
-	xy Peat or Peat (S	3)		•									
Restrictive Layer (if observed):													
Type: Rock													
Depth (inches): Surface Hydric Soil Present? Yes No No													
	l rocky for soil sa	mple (fill s	soils)			•							
	A												
HYDROLO	GY												
Wetland Hvd	rology Indicator	s:											
-	-		quired; check all th	at apply)			Second	darv Indicators (m	ninimum of two required)				
☐ Surface W	•		•		Leaves (B9)			rface Soil Cracks					
☐ High Wate	r Table (A2)			tic Fauna (☐ Dra	ainage Patterns (B	310)				
☐ Saturation			_		ants (B14)			y-Season Water T					
☐ Water Mar	ks (B1)			_	de Odor (C1)			ayfish Burrows (C					
☐ Sediment I	Deposits (B2)		☐ Oxid	ized Rhizo	spheres on Living R	oots (C3)			n Aerial Imagery (C9)				
☐ Drift Depo	sits (B3)		☐ Prese	nce of Red	luced Iron (C4)		☐ Stu	inted or Stressed I	Plants (D2)				
☐ Algal Mat	or Crust (B4)		Rece	nt Iron Red	luction in Tilled Soil	ls (C6)	☐ FA	.C-Neutral Test (I	D5)				
☐ Iron Depos	its (B5)		☐ Thin	Muck Surf	ace (C7)								
☐ Inundation	Visible on Aerial	Imagery ((B7) Gaug	e or Well I	Oata (D9)								
☐ Sparsely V	egetated Concave	Surface (B8)	(Explain i	in Remarks)								
Field Observa	ations:												
Surface Water	Present? Ye	es 🔲 No	Depth (incl	nes): None									
Water Table P	Water Table Present? Yes \square No \boxtimes Depth (inches): ≥ 15												
Saturation Pre	sent? Ye	s 🔲 No	Depth (incl	nes): <u>>15</u>	Wetland Hy	drology Pro	esent?	Yes 🗌	No 🛛				
(includes capil	llary												
fringe)	1.15					\ :C :11							
Describe Reco	raed Data (stream	n gauge, m	onitoring well, aer	iai photos,	previous inspections	s), 11 ava1lab	ie:						
Damarkas Isaa	t couth of access =	road											
Kemarks: Jus	emarks: Just south of access road												

WETLAND DETERMINATION DATA FORM – Midwest Region												
Project/Site:	Port of East S	t. Louis	<u>i</u>	City/County:	Eas	t St. Lou	uis; St	. Clair	Samplin	g Date:	06-19-2012	2
Applicant/Owner:	Slay Industrie	<u>s</u>		State:	Illin	nois_			Samplin	g Point:	<u>S14</u>	
Investigator(s):	SCI Engineer	ing, Inc	<u> </u>		Sec	tion, To	wnshi	ip, Range:		S23 T2N	R10W	
Landform (hillslope, ter		Loc	al relief	f (cond	cave, convex, n	none):						
Slope (%):						Long: Datum:						
Soil Map Unit Name:	Soil Map Unit Name:					NWI classification:						
Are climatic/hydrologic	conditions on t	he site	ypical fo	or this time of ye	ear? Yes No [(If no, explain in Remarks						Remarks.)	
Are Vegetation N, Soil	Y, or Hydrolog	y <u>N</u> sigr	ificantly	disturbed?	Are "Normal Circumstances" present				oresent?	Yes 🛛	No 🗌	
Are Vegetation N, Soil	N, or Hydrolog	y <u>N</u> natı	ırally pro	oblematic?		((If nee	eded, explain a	ny answer	s in Remar	ks.)	
SUMMARY OF FI	g san	npling	poir	nt locations	, transe	cts, impo	rtant feat	ures, etc.				
Hydrophytic Vegetation												
Hydric Soil Present: Yes ☐ No ☐					Is the Sampled Area within a Wetland?			Yes□	No 🏻			
Wetland Hydrology Present: Yes				□ No ⊠			within a victaria.				_	

VEGETATION – Use scientific names of plants.

Remarks: Area is located south of an existing rail bed and appears to have been filled in the past.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1 2				Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)		
3 4				Total Number of Dominant Species across all Strata: 4 (B)		
5		otal Cover		Percent of Dominant Species that are OBL, FACW, or FAC: 75 (A/B)		
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:		
1				Total % Cover of: Multiply by:		
2				OBL species x1 =		
3				FACW species x2 =		
4				FAC species 105		
5				FACU species $\underline{60}$ $x4 = \underline{240}$		
	= Te	otal Cover		UPL species x5 =		
Herb Stratum (Plot size:)				Column Totals: <u>165</u> (A) <u>555</u> (B)		
1. <u>Poa pratensis</u>	40	Y	FAC	Prevalence Index = $B/A = 3.37$		
2. <u>Conyza canadensis</u>	30	Y	FAC	Hydrophytic Vegetation Indicators:		
3. <u>Galium aparine</u>	10		FAC	X Dominance Test is >50%		
4. <u>Ambrosia trifida</u>	25	Y	FAC	Prevalence Index is ≤3.0¹		
5. <u>Festuca subverticillata</u>	60	Y	FACU	Morphological Adaptations ¹ (Provide		
	$\underline{165} = \text{Tota}$	l Cover		supporting data in Remarks or on a separate sheet)		
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)		
1				¹ Indicators of hydric soil and wetland hydrolog		
2				must be present, unless disturbed or problematic.		
	= Total Cover Hydrophytic Yes ⊠ Vegetation Present?					

SOIL Sampling Point: <u>S14</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)													
Depth	Matrix	Î				edox Features							
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc	2	Texture	Remarks			
0-8	10 YR 4/4	40							sic				
	10 YR 3/3	60											
¹Type: C=Con	centration, D=De	pletion, RI	M=Reduc	ed Matrix,	CS=Cove	ered or Coated Sand (Grains. ² Lo	ocation:	PL=Pore Lining,	M=Matrix			
Hydric Soil I		· · · · · ·							Problematic Hyo				
☐ Histosol (A				Sandy G	leyed Mat	rix (S4)			ie Redox (A16)				
☐ Histic Epic				Sandy R	•	` '			nese Masses (F12	2)			
☐ Black Hist				Stripped		6)		_	lain in Remarks)	,			
☐ Hydrogen				Loamy N			_	` 1	,				
☐ Stratified I				Loamy C									
2 cm Muck	-			Depleted	•								
	elow Dark Surfac	e (A11)		Redox D			³ Indica	tors of h	ydrophytic vegeta	ation and wetland			
_	Surface (A12)	` /	Г	_] Depleted	Dark Sur	face (F7)	hydrolo	ogy mus	t be present, unles				
	eky Mineral (S1)			Redox D			problei	natic.					
•	y Peat or Peat (S	3)		_	1								
	yer (if observed)												
Type: Rock								~					
Depth (inches): 8 Hydric Soil Present? Yes No 🗵													
•	likely fill materia	al based or	n observe	d character	ristics.		u .						
	·												
HYDROLO	GY												
Wetland Hyd	rology Indicators	s•											
-	tors (minimum of		mired: cl	eck all tha	t apply)			Second	dary Indicators (m	ninimum of two required)			
☐ Surface Wa		one is rec				eaves (B9)			rface Soil Cracks	•			
☐ High Wate	` ′			☐ Aquati					ainage Patterns (B				
☐ Saturation				_		ants (B14)			y-Season Water T				
☐ Water Mar	` ′				-	le Odor (C1)			ayfish Burrows (C				
☐ Sediment I				-		pheres on Living Ro	ots (C3)		•	n Aerial Imagery (C9)			
☐ Drift Depo	-					uced Iron (C4)			inted or Stressed I				
☐ Algal Mat						uction in Tilled Soils	(C6)		.C-Neutral Test (I				
☐ Iron Depos	` '				luck Surfa		()	_		- /			
_	Visible on Aerial	Imagery ((B7)		or Well D								
	egetated Concave			_		n Remarks)							
Field Observa	itions:												
Surface Water	Present? Ye	s 🔲 No	D 🛛	epth (inche	s): None								
Water Table P	Water Table Present? Yes □ No ☒ Depth (inches): ≥8												
Saturation Pre				epth (inche		Wetland Hyd	rology Pro	esent?	Yes 🗌	No 🏻			
(includes capil			_		_		<i>S</i> ,						
fringe)													
Describe Reco	rded Data (stream	gauge, m	onitoring	well, aeria	ıl photos,	previous inspections)	, if availab	le:					
Remarks:	emarks:												

	WET	ΓLANI) DET	ERMINATI	ION I	DAT/	A F(ORM – Mid	lwest Re		ppendix D - Wetland Deline
Project/Site:	Port of East S			City/County:	1			St. Clair	Sampling		06-19-2012
Applicant/Owner:	Slay Industri	ies		State:	Illino	ois			Sampling	g Point:	<u>S15</u>
Investigator(s):	SCI Enginee	ring, Inc	<u></u>		Sect	ion, To	wnsł	nip, Range:		S23 T2N	R10W
Landform (hillslope, ter	race, etc.):				Loca	al relief	f (cor	ncave, convex, n	none):		
Slope (%):			Lat:		Lo	ong:			Datum:		
Soil Map Unit Name:		,		. 1	NW	I classif	ficati	on:			
Are climatic/hydrologic	or this time of ye	ear?			Yes 🛛 No	[] (If no,	explain in	Remarks.)			
Are Vegetation N, Soil	Y, or Hydrolog	gy <u>N</u> sigr	ificantly	y disturbed?		1	Are "	'Normal Circum	nstances" p	resent?	Yes ⊠ No □
Are Vegetation N, Soil	N, or Hydrolog	gy <u>N</u> natı	ırally pr	oblematic?		((If ne	eeded, explain a	ny answers	in Remarl	ks.)
SUMMARY OF FI	NDINGS –	Attach	ı site n	nap showing	ş sam	pling	poi	nt locations	, transec	ts, impo	ortant features, etc.
Hydrophytic Vegetation	Present:	Yes 🗌	No 🏻	1							
Hydric Soil Present:	,	Yes 🗌	No 🛛	ı				pled Area Vetland?		Yes \square	No 🏻
Wetland Hydrology Pres	sent:	Yes 🗌	No 🛛	ı		*********	1	CHANG.			140 🖂
Remarks: Area is locate	ed along access	road nea	ır northe	ern boundary of	the sub	oject site	ie.				
VEGETATION – Use scientific names of plants.											
Tree Stratum (Plot size:	:)			Abso % Co		Domin Specie		Indicator Status	Dominanc	e Test wo	rksheet:
1 Populus deltaides	10				EACW	Number of	Dominant	t Charins			

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:					
1. <u>Populus deltoides</u>	10		FACW	Number of Dominant Species					
2. Acer saccharinum	15		FACW	that are OBL, FACW, or FAC:	<u>2</u> (A)				
3. <u>Acer negundo</u>	15		FACW	Total Number of Dominant					
4				Species across all Strata:	<u>4</u> (B)				
5				Percent of Dominant Species					
	$\underline{40} = \text{Total}$	Cover		that are OBL, FACW, or FAC:	<u>50</u> (A/B)				
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:					
1. <u>Lonicera maackii</u>	35	Y	NI	Total % Cover of:	Multiply by:				
2				OBL species	x1 =				
3				FACW species <u>40</u>	$x2 = \underline{80}$				
4				FAC species 80	x3 = 240				
5				FACU species <u>50</u>	x4 = 200				
	35 = Total	Cover		UPL species x5 =					
Herb Stratum (Plot size:)				Column Totals: 170 (A)	520 (B)				
1. <u>Poa pratensis</u>	50	Y	FAC	Prevalence Index = $B/A = 3.06$					
2. <u>Conyza canadensis</u>	30	Y	FAC	Hydrophytic Vegetation Indic	ators:				
3. <u>Sorghum halepense</u>	40	Y	FACU	Dominance Test is >50%					
4. <u>Asclepias syriaca</u>	10		FACU	Prevalence Index is ≤3.0 ¹					
5				Morphological Adaptatio					
	$\underline{130} = \text{Tota}$	al Cover		supporting data in Remarks or o sheet)	n a separate				
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic (Explain)	Vegetation1				
1				¹ Indicators of hydric soil and we					
2				must be present, unless disturbed or problematic.					
	= T	otal Cover		Hydrophytic Yes Vegetation Present?	s 🗌 No 🛛				

SOIL Sampling Point: <u>S14</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth	Matrix				edox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture	Remarks			
	,		,		<u>, , , , , , , , , , , , , , , , , , , </u>							
¹ Type: C=Con	centration. D=De	pletion, RI	M=Reduced Matrix	CS=Cove	ered or Coated Sand	Grains. ² Lo	ocation:	PL=Pore Lining.	M=Matrix			
Hydric Soil I		pretion, re		05 001	ored or Courted State			Problematic Hyo				
☐ Histosol (A			☐ Sandy G	leved Mat	trix (S4)			ie Redox (A16)				
☐ Histic Epic			☐ Sandy R	•				nese Masses (F12	2)			
☐ Black Hist			☐ Stripped				_	lain in Remarks)	-,			
☐ Hydrogen			☐ Loamy N				1					
☐ Stratified I			Loamy (-								
2 cm Mucl	-		☐ Depleted	-								
Depleted E	Below Dark Surface	ce (A11)	Redox D			³ Indica	tors of h	ydrophytic vegeta	ation and wetland			
_	Surface (A12)		☐ Depleted			hydrole	ogy mus	t be present, unles	ss disturbed or			
☐ Sandy Muc	cky Mineral (S1)		☐ Redox D	epression	s (F8)	problei	natic.					
5 cm Mucl	xy Peat or Peat (S	3)										
Restrictive La	ayer (if observed)):										
Type: Rock						77 1 .	G. T. D.	49 \$7 -	1 N. 57			
Depth (inches): Surface Hydric Soil Present? Yes No No												
Remarks: Una	able to obtain soil	sample ba	sed on rocky condit	ions.								
*****	CT.											
HYDROLO	GY											
Wetland Hyd	rology Indicator	s:										
-			quired; check all tha	t apply)			Second	dary Indicators (m	ninimum of two required)			
☐ Surface W			-		eaves (B9)		Su	rface Soil Cracks	(B6)			
☐ High Wate	r Table (A2)		☐ Aquat	ic Fauna (B13)		☐ Dra	ainage Patterns (B	310)			
☐ Saturation			_		ants (B14)		☐ Dr	y-Season Water T	able (C2)			
☐ Water Mar	ks (B1)			_	le Odor (C1)		☐ Cra	ayfish Burrows (C	C8)			
☐ Sediment I	Deposits (B2)		☐ Oxidiz	ed Rhizos	spheres on Living Ro	oots (C3)	☐ Sat	turation Visible or	n Aerial Imagery (C9)			
☐ Drift Depo	sits (B3)		☐ Presen	ce of Red	uced Iron (C4)		☐ Stu	inted or Stressed I	Plants (D2)			
☐ Algal Mat	or Crust (B4)		Recen	t Iron Red	uction in Tilled Soil	s (C6)	☐ FA	.C-Neutral Test (I	05)			
☐ Iron Depos	sits (B5)		☐ Thin N	Auck Surf	ace (C7)							
☐ Inundation	Visible on Aerial	Imagery ((B7) Gauge	or Well I	Oata (D9)							
☐ Sparsely V	egetated Concave	Surface (B8)	(Explain i	n Remarks)							
Field Observa	Field Observations:											
Surface Water	Present? Ye	s 🔲 No	Depth (inche	es): <u>None</u>								
Water Table P	resent? Ye	s 🔲 No	Depth (inche	es): <u>>2</u>								
Saturation Pre	sent? Ye	s 🔲 No	Depth (inche	es): <u>>2</u>	Wetland Hy	drology Pro	esent?	Yes 🗌	No 🖂			
(includes capil	llary											
fringe)				.114		-) :£:1-1-	1					
Describe Reco	rueu Data (stream	ı gauge, m	omtoring well, aeri	u pnotos,	previous inspections	s), 11 availab	ie:					
Remarks:												
Acmarks.												

	WE	TLANI) DET	ERMINATI	ION I	DAT <i>A</i>	\ F	ORM – Mid	lwest Re	·	opendix D - Wetland Deline
Project/Site:	Port of Eas	st St. Louis	<u>s</u>	City/County:	East	St. Lou	ıis; S	St. Clair	Sampling	g Date:	<u>06-19-2012</u>
Applicant/Owner:	Slay Indust	tries		State:	Illino	ois			Sampling	g Point:	<u>S16</u>
Investigator(s):	SCI Engine	eering, Inc	<u>.</u>		Secti	ion, To	wns	hip, Range:		S23 T2N	R10W
Landform (hillslope, terr	race, etc.):				Loca	ıl relief	(cor	ncave, convex, r	none):		
Slope (%):			Lat:	T	Lc	ong:			Datum:		
Soil Map Unit Name:					NWI	I classif	icat	ion:	1		
Are climatic/hydrologic	conditions o	n the site t	typical fo	or this time of ye	ear?			Yes 🛛 No	[] (If no,	explain in	Remarks.)
Are Vegetation N, Soil	Y, or Hydrol	ogy <u>N</u> sigr	nificantly	/ disturbed?		A	Are '	"Normal Circun	nstances" p	present?	Yes ⊠ No □
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)											
SUMMARY OF FI	NDINGS -	– Attacł	ı site n	nap showing	; sam	pling	poi	int locations	, transec	ets, impo	ortant features, etc.
Hydrophytic Vegetation	Present:	Yes 🗌	No 🛛			_				T	
Hydric Soil Present:		Yes 🗌	No 🛛		Is the Sampled Area within a Wetland?					Yes 🗆	No 🏻
Wetland Hydrology Pres	sent:	Yes 🗌	No 🛛								
Remarks: Point taken no	ear the northe	astern bou	indary of	f the subject site	ş.						
VEGETATION – U	se scientií	fic name	es of pl	ants.							
Tree Stratum (Plot size:	Absolute Dominant Indicator Species? Status Absolute Stratum (Plot size:) Dominant Indicator Status Dominance Test worksheet:										
1. Populus deltoides	1. <u>Populus deltoides</u>								Number of Dominant Species		
2. Acer saccharinum				15				FACW	that are OBL, FACW, or FAC: $\underline{2}$ (A)		
3		Total 1				Total Number of Dominant					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksneet.
1. Populus deltoides	5	_	FACW	Number of Dominant Species
2. Acer saccharinum	15		FACW	that are OBL, FACW, or FAC: $\underline{2}$ (A)
3				Total Number of Dominant
4				Species across all Strata: $\underline{4}$ (B)
5				Percent of Dominant Species
	20 = Total	Cover		that are OBL, FACW, or FAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1. <u>Lonicera maackii</u>	25	Y	NI	Total % Cover of: Multiply by:
2				OBL species x1 =
3				FACW species $\underline{40}$ $x2 = \underline{80}$
4				FAC species $\underline{80}$ $x3 = \underline{240}$
5				FACU species $\underline{50}$ $x4 = \underline{200}$
	$\underline{25}$ = Total	Cover		UPL species x5 =
Herb Stratum (Plot size:)				Column Totals: <u>170</u> (A) <u>520</u> (B)
1. <u>Poa pratensis</u>	35	Y	FAC	Prevalence Index = $B/A = 3.06$
2. <u>Conyza canadensis</u>	35	Y	FAC	Hydrophytic Vegetation Indicators:
3. <u>Sorghum halepense</u>	30	Y	FACU	Dominance Test is >50%
4. <u>Asclepias syriaca</u>	10		FACU	Prevalence Index is ≤3.0 ¹
5. <u>Rumex crispus</u>	15		FAC	Morphological Adaptations ¹ (Provide
	$\underline{125} = \text{Tota}$	al Cover		supporting data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)				Problematic Hydrophytic Vegetation1 (Explain)
1				¹ Indicators of hydric soil and wetland hydrology
2				must be present, unless disturbed or problematic.
	= T	otal Cover		Hydrophytic Yes ☐ No ☒ Vegetation Present?
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL Sampling Point: <u>S16</u>

Profile Descri	iption: (Describe	to the dep	oth needed to docu	ment the in	dicator or confirm	the absen	ce of indicators.)	
Depth	Matrix			Red	ox Features			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10 YR 3/2						sicl	
	10 YR 3/3							
¹ Type: C-Con	contration D_Da	nlation DI	A-Paduard Matrix	CS-Cover	ad ar Castad Sand G	roins 2I o	cation: PL=Pore Lining,	M_Moteix
		epietion, Kr	vi=Reduced Mairix,	CS=Cover	ed of Coated Sand G			
Hydric Soil In				136.	(C.4)		ors for Problematic Hyo	aric Sous":
☐ Histosol (A	*		☐ Sandy G	•	x (S4)		st Prairie Redox (A16)	
☐ Histic Epid			☐ Sandy Ro				-Manganese Masses (F12	2)
☐ Black Histi	` ,		Stripped			☐ Oth	er (Explain in Remarks)	
Hydrogen S			Loamy N	-				
Stratified L	•		Loamy C	-				
2 cm Muck			☐ Depleted			_		
-	Below Dark Surfa	ce (A11)	Redox D		` '		ors of hydrophytic vegeta	
	Surface (A12)		☐ Depleted	Dark Surfa	ice (F7)	problen	gy must be present, unles	ss disturbed or
☐ Sandy Muc	cky Mineral (S1)		Redox D	epressions ((F8)	prooten	iatic.	
5 cm Muck	xy Peat or Peat (S	3)				•		
Restrictive La	ayer (if observed):						
Type: Rock						Hydnia	Coil Dungout? Vog	No ⊠
Depth (inches)): <u>6</u>					Hydric	Soil Present? Yes	NO 🔼
Remarks: Roc	cky soil condition	s observed	at approximately 6	inches belo	w surface. The area l	has likely l	peen filled in the past bas	ed on site observations.
HYDROLO	GY							
Wotland Hyd	rology Indicator	201						
-	-		uired; check all tha	t annly)		I	Sacandary Indicators (m	ninimum of two required)
☐ Surface Wa	•	of one is rec		Stained Lea	avas (DO)		☐ Surface Soil Cracks	*
	` '							` ′
☐ High Wate			_	c Fauna (B			Drainage Patterns (E	
Saturation	` '			quatic Plan			Dry-Season Water T	
☐ Water Mar			·	gen Sulfide		. (66)	Crayfish Burrows (C	
Sediment I	-			_	heres on Living Root	ts (C3)	Saturation Visible or	
☐ Drift Depo					ced Iron (C4)		Stunted or Stressed I	` ′
Algal Mat					ction in Tilled Soils ((C6)	☐ FAC-Neutral Test (I	05)
☐ Iron Depos				Iuck Surfac				
	Visible on Aeria		-	or Well Da				
	egetated Concave	e Surface (l	B8)	(Explain in	Remarks)			
Field Observa	ations:							
Surface Water	Present? Ye	es 🔲 No	Depth (inche	es): None				
Water Table P	resent? Ye	es 🔲 No	Depth (inche	es): <u>>6</u>				
Saturation Pres	sent? Ye	es 🔲 No	Depth (inche	es): <u>>6</u>	Wetland Hydr	ology Pre	sent? Yes	No 🛛
(includes capil	llary							
fringe)	1.15			1 1 /				
Describe Reco	orded Data (strear	n gauge, m	onitoring well, aeria	u photos, pr	revious inspections),	11 availabl	e:	
n .								
Remarks:								

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	Port of East St. Louis-City	of East St. Louis		City/County:	East St. Lou	is, St. Clair	Sampling Date: 9/18/2013
Applicant/Owner:	City of East St. Louis					State: IL	Sampling Point: S1
Investigator(s):	M. Goodare & M. Eldridge	9		Sect	ion, Townshi	p, Range: S23 T2N R10W	
Landform (hillslope,	terrace, etc.): Mississipp	· · · · · · · · · · · · · · · · · · ·				elief (concave, convex, none):	
Slope (%):				Long:			Datum:
Soil Map Unit Name						NWI class	
•	ogic conditions on the site t	**	•	_		(If no, explain in Remark	
	N, Soil N,		_			ormal Circumstances" present?	
Are Vegetation	N, Soil N,				`	led, explain any answers in Re	,
SUMMARY OF	FINDINGS Attach				tions, trai	nsects, important featu	res, etc.
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	?	Yes X	No No		Sampled Are a Wetland?	ea Yes	K No
Remarks: S1 is located within	a roadside ditch along Rou	ite 3. Hydrology prov	ided by higher	water table and	d roadside sto	ormwater runoff.	
VEGETATION -	Use scientific nam	es of plants.				•	
Tree Stratum (Plot 1.	size: <u>30' radius</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	t:
						Number of Dominant Specie That Are OBL, FACW, or FA	
4.							
5				= Total Cover		Total Number of Dominant Species Across All Strata:	1 (B)
l	um (Plot size: 15' radius					Percent of Dominant Species That Are OBL, FACW, or FA	
						Prevalence Index workshee	rt:
5.							
Herb Stratum (Plot 1. Typha angustifo 2. 3.			100%	= Total Cover Yes	OBL	Total % Cover of: OBL species 100% FACW species FAC species FACU species	Multiply by: x1 = 1 x2 = x3 = x4 =
4.						UPL species	x5 =
6						Column Totals: 1.00 Prevalence Index =	(-/
8. 9.						Hudrophytic Vocatetics Inc	dia atau
10. 11.						Hydrophytic Vegetation Inc	ilicators.
12. 13.						X 1-Rapid Test for Hyd X 2-Dominance Test is	
14.						X 3-Prevalence Index	
15.							aptations ¹ (Provide supporting
16. 17.							on a separate sheet) bhytic Vegetation ¹ (Explain)
18.						1 Toblematic Trydrop	Trytte vegetation (Explain)
19.						¹ Indicators of hydric soil and	wetland hydrology must
20						be present, unless disturbed	or problematic.
			100%	= Total Cover			
Woody Vine Stratur	m (Plot size: 30' radius)				Hydrophytic Vegetation	
2.	<u>-</u>			= Total Cover		Present? Yes	X No
Remarks: (Include	photo numbers here or on	a separate sheet.)					

SOIL

1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Depleted Below Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type:	Coast P Iron-Mai Dark Sui Very Sha Other (E	Remarks peat layer organic layer organic layer ining, M=Matrix. Idematic Hydric Soils³: Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Iallow Dark Surface (TF12) Explain in Remarks) hydrophytic vegetation and indrology must be present, Ilisturbed or problematic.
0-2 10YR 2/2 80 2-18 10YR 5/3 10YR 5/3 20 RM 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) X Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Type: Depth (inches): Historia (A12) Historia (A12) Depth (inches): Historia (A12) De	Location: PL=Pore Li Indicators for Probl Coast P Iron-Mai Dark Sui Very Sha Other (E	peat layer organic layer ining, M=Matrix. lematic Hydric Soils³: Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Iallow Dark Surface (TF12) Explain in Remarks) hydrophytic vegetation and Irdrology must be present,
2-18	Location: PL=Pore Li Indicators for Probl Coast P Iron-Ma Dark Sui Very Sha Other (E	organic layer organic layer ining, M=Matrix. Idematic Hydric Soils³: Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Inface (S7) Inface (TF12) Inf
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Redox (S5) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) x Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Restrictive Layer (if observed): Type: Depth (inches): Hydrics C=Covered or Coated Sand Grains. 2 Loamy Gleyed Matrix (S4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Location: PL=Pore Li Indicators for Probl Coast P Iron-Ma Dark Sui Very Sha Other (E	ining, M=Matrix. Ilematic Hydric Soils³: Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Iallow Dark Surface (TF12) Explain in Remarks) hydrophytic vegetation and Irdrology must be present,
Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Z cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Stratified Layer (if observed): Type: Depth (inches): HY Remarks:	Indicators for Probl Coast P Iron-Mai Dark Sui Very Sha Other (E	lematic Hydric Soils ³ : Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Inganese Masses (TF12) Inganese Mas
Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Z cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Stratified Layer (if observed): Type: Depth (inches): HY Remarks:	Indicators for Probl Coast P Iron-Mai Dark Sui Very Sha Other (E	lematic Hydric Soils ³ : Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Inganese Masses (TF12) Inganese Mas
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Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) Stratified Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Stripped Matrix (F2) A Depleted Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Stripped Matrix (F2) A Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Function of the strip of	Indicators for Probl Coast P Iron-Mai Dark Sui Very Sha Other (E	lematic Hydric Soils ³ : Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Inganese Masses (TF12) Inganese Mas
Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) Stratified Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Stripped Matrix (F2) A Depleted Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Stripped Matrix (F2) A Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Function of the strip of	Indicators for Probl Coast P Iron-Mai Dark Sui Very Sha Other (E	lematic Hydric Soils ³ : Prairie Redox (A16) Inganese Masses (F12) Irface (S7) Inganese Masses (TF12) Inganese Mas
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Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sem Mucky Mineral (S1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Hydrogen Sulfide (A3) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydrogen Sulfide (A4) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Type: Depth (inches):	Iron-Mai Dark Sui Very Sha Other (E	Inganese Masses (F12) Inface (S7) Inface (S7) Inface (TF12) Inface (TF12
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Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Redox Depressions (F8) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Redox Dark Surface (F6) Redox Depressions (F8)	Very Sha Other (E ³ Indicators of I wetland hy unless d	allow Dark Surface (TF12) Explain in Remarks) hydrophytic vegetation and redrology must be present,
Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Loamy Gleyed Matrix (F2) x Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hermarks:	Other (E 3Indicators of wetland hy unless d	Explain in Remarks) hydrophytic vegetation and rdrology must be present,
2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): He	³ Indicators of wetland hy unless d	hydrophytic vegetation and vdrology must be present,
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Redox Depressions (F8) Helper Surface (F6) Pepleted Dark Surface (F6) Redox Depressions (F8) Redox Dark Surface (F6) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F7) Pepleted Dark Surface (F6) Pepleted Dark Surface (F7) Pepleted	wetland hy unless d	drology must be present,
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Hermarks:	wetland hy unless d	drology must be present,
Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): HY Remarks:	wetland hy unless d	drology must be present,
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): HY Remarks:	unless d	•
Restrictive Layer (if observed): Type: Depth (inches): Hermarks:		listurbed or problematic.
Type: Depth (inches): Hy Remarks:	udrio Coll Bussouto	
Depth (inches): H	rdrio Cail Drassuto	
Remarks:	Idrio Call Decases	
	ydric Soil Present?	Yes x No
HYDROLOGY Western Hydrology In displayers		
Wetland Hydrology Indicators:	Cocondo	ary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)		, , , , , , , , , , , , , , , , , , , ,
Surface Water (A1) Water-Stained Leaves (B9)		urface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna (B13)		rainage Patterns (B10)
x Saturation (A3) True Aquatic Plants (B14)		y-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)		ayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3		aturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) x Presence of Reduced Iron (C4)	Stu	unted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)	Ge	eomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	FA	AC-Neutral Test (D5)
x Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)		
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)		
Field Observations:		
Surface Water Present? Yes No x Depth (inches):		
Water Table Present? Yes No x Depth (inches):		
	drology Present?	Yes X No
(includes capillary fringe)	ilology Fresent:	Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available		
Historical photos show as a wet area.	e.	
Pomarko:		
Remarks: Saturation from surface to 2-3 inches down.		
Saturation from Surface to 2-3 inches down.		

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	Port of East St. Louis-City of	East St. Louis		City/County:	East St. Lou	is, St. Clair	Sampling Date: <u>9/18/2013</u>
Applicant/Owner:	City of East St. Louis					State: IL	Sampling Point: S2
Investigator(s):	M. Goodare & M. Eldridge			Sect	ion, Townshi	o, Range: S23 T2N R10W	
Landform (hillslope,	terrace, etc.): Mississippi ri	iver floodplain			Local r	elief (concave, convex, none):	flat
Slope (%):	Lat:			Long:			Datum:
Soil Map Unit Name						NWI classit	ication: PEMC
Are climatic / hydrole	ogic conditions on the site typ	ical for this time of yea	ar?	Yes	x No	(If no, explain in Remarks	s.)
Are Vegetation	N, Soil N, or	Hydrology Y si	gnificantly di	sturbed?	Are "No	rmal Circumstances" present?	Yes X No
Are Vegetation	N, Soil N, or	Hydrology N na	aturally probl	lematic?	(If need	ed, explain any answers in Ren	narks.)
SUMMARY OF	FINDINGS Attach si	te map showing	sampling	point loca	tions, trai	nsects, important featur	es, etc.
Hydrophytic Vegeta	tion Present? Y	es No	Х	Is the	Sampled Are	ea	
Hydric Soil Present?	? Y	es X No			a Wetland?	Yes	No <u>x</u>
Wetland Hydrology	Present? Y	es No	Χ				
Remarks: S2 is located upslop	pe of S1 on a roadside ditch al	long Route 3.					
VEGETATION -	Use scientific names	of plants.					
Tree Circles (D)	-i 00' "		Absolute	Dominant	Indicator		
Tree Stratum (Plot :	size: 30' radius)	-	% Cover	Species?	Status	Dominance Test worksheet	:
2.						Number of Dominant Species	;
3.						That Are OBL, FACW, or FAC	
4.							
5						Total Number of Dominant	
		-		= Total Cover		Species Across All Strata:	(B)
Sapling/Shrub Strate 1.	um (Plot size: 15' radius)				Percent of Dominant Species That Are OBL, FACW, or FAC	
3.							
4.						Prevalence Index workshee	::
5.							
, , , , , , , , , , , , , , , , , , ,		-	=	= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plot			F00/	V	LIDI	OBL species	x1 =
Festuca arundir Pooidaea spp.	iaea		50% 40%	Yes Yes	UPL UPL	FACW species FAC species	x2 = x3 =
3. Taraxacum offic	cinale		10%	No	FACU	FACU species 10%	x4 = 0.4
4.						UPL species 90%	x5 = 4.5
5						Column Totals: 1.00	(A) <u>4.9</u> (B)
6						Provolonce Index – I	B/A = 4.90
7. 8.		-				Prevalence Index = I	5/A = 4.90
9.							
10.						Hydrophytic Vegetation Ind	icators:
						1-Rapid Test for Hyd 2-Dominance Test is	
1 /						3-Prevalence Index	
						4-Morphological Ada	ptations ¹ (Provide supporting
16.							on a separate sheet)
						Problematic Hydrop	hytic Vegetation ¹ (Explain)
18. 19.						¹ Indicators of hydric soil and v	votland hydrology must
20.						be present, unless disturbed	, ,,
			100% =	= Total Cover		be precent, amose alexandea	or problemation
		-					
Woody Vine Stratum	· ·)				Hydrophytic	
1						Vegetation Present? Yes	No. Y
<u>۔۔</u>				= Total Cover		Fresent Yes_	No_X_
		-		. 5.51 50401			
Remarks: (Include	photo numbers here or on a s	eparate sheet.)				•	

SOIL

Profile Desc	ription: (Describe to th	ne depth needed	I to document the in	dicator or co	onfirm the a	bsence of	f indicators.)		
Depth	Matrix		Red	ox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remar	ks
0-2	10YR 2/2	80						peat la	/er
2-18	10YR 5/3	·	10YR 5/3	20				organic I	ayer
		· 							
¹ Type: C=C	oncentration, D=Depletion	on, RM=Reduced	d Matrix, CS=Covered	d or Coated S	Sand Grains.	² Location	on: PL=Pore L	ining, M=Matrix.	_
Hydric Soil I		•	•			Indic	ators for Prob	plematic Hydric Soils ³ :	
Histoso	l (A1)		Sandy Gleyed	d Matrix (S4)			Coast I	Prairie Redox (A16)	
Histic E	pipedon (A2)		Sandy Redox	(S5)			Iron-Ma	anganese Masses (F12)
Black F	listic (A3)		Stripped Matr	rix (S6)			Dark Su	urface (S7)	
Hydrog	en Sulfide (A4)		Loamy Mucky	/ Mineral (F1))		Very Sh	nallow Dark Surface (TF	12)
Stratifie	d Layers (A5)		Loamy Gleye	d Matrix (F2)			Other ((Explain in Remarks)	
	uck (A10)		Depleted Mat						
	ed Below Dark Surface (A11)	Redox Dark S				2		
	Park Surface (A12)		Depleted Dar		7)			f hydrophytic vegetation	
	Mucky Mineral (S1)		Redox Depre	ssions (F8)				ydrology must be prese	-
	ucky Peat or Peat (S3)						uniess	disturbed or problemation).
Restrictive L	.ayer (if observed):								
Type:									
Depth (i	nches):					Hydric	Soil Present?	Yes x	No
HYDROL	OGY								
Wetland Hyd	Irology Indicators:								
Primary India	cators (minimum of one i	s required: check	call that apply)				Second	lary Indicators (minimun	of two required)
	Water (A1)		Water-Staine	•	9)			urface Soil Cracks (B6)	
	ater Table (A2)		Aquatic Faun					rainage Patterns (B10)	
	ion (A3)		True Aquatic					ry-Season Water Table	(C2)
	Marks (B1)		Hydrogen Sul	•	•	- (00)		rayfish Burrows (C8)	(00)
	ent Deposits (B2)		Oxidized Rhiz	•	ū	s (C3)		aturation Visible on Aer	
	posits (B3) at or Crust (B4)		x Presence of F		. ,	26)		tunted or Stressed Plan Geomorphic Position (D2	
	posits (B5)		Thin Muck Su		i ilieu Solis (t	50)		AC-Neutral Test (D5))
	ion Visible on Aerial Ima	agery (B7)	Gauge or We					710 110dilai 100t (20)	
	ly Vegetated Concave S	. ,	Other (Explai	` ,	;)				
Field Observ	rotiono								
Field Observ Surface Wat		res No x	Donth (inches)						
Water Table		res No x							
Saturation P		res No x	- : : : : : : :		Wetland	Hvdrolog	y Present?	Yes	No x
(includes car		· · · · · · · · · · · · · · · · · · ·				,	,,		
	corded Data (stream gai	uge, monitoring v	vell, aerial photos, pre	evious inspec	tions), if ava	ilable:			
Remarks:	adaida ditah								
Upslope of ro	ausiue uitch.								

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	Port of East St. Louis-Ci	ty of East St. Louis	i	City/County:	East St. Lo	uis, St. Clair	Sampling Date: 9/18/2013
Applicant/Owner:	City of East St. Louis					State: IL	Sampling Point: S3
Investigator(s):	M. Goodare & M. Eldrido	је		Sect	ion, Townsh	ip, Range: S23 T2N R10W	
Landform (hillslope	, terrace, etc.): Mississi	ppi river floodplain			Local	relief (concave, convex, none):	flat
Slope (%):	Lat:			Long:			Datum:
Soil Map Unit Name	e: Urban Land (53	3)				NWI class	ification: PEMC
Are climatic / hydro	logic conditions on the site	typical for this tim	e of year?	Yes	x No	(If no, explain in Remark	ks.)
Are Vegetation	Y, SoilN	, or Hydrology	Y significantly d	isturbed?	Are "N	ormal Circumstances" present	? Yes <u>X</u> No
Are Vegetation	N, Soil N	, or Hydrology	N naturally prob	lematic?	(If need	ded, explain any answers in Re	emarks.)
SUMMARY OF	FINDINGS Attach	n site map sho	wing sampling	g point loca	tions, tra	nsects, important featu	ires, etc.
Hydrophytic Vegeta	ation Present?	Yes X	No	Is the	Sampled Ar	ea	
Hydric Soil Present	?	Yes X			a Wetland?	Yes	X No
Wetland Hydrology	Present?	Yes X	No				
			. Wetland A has be	een mowed this	season. Th	ne area drains into Wetland B v	vhich drains into Wetland C. Two fil
VEGETATION	Use scientific nar	nes of plants.	Absolute	Dominant	Indicator	1	
Tree Stratum (Plot	size: 30' radius)	% Cover	Species?	Status	Dominance Test workshee	et:
1. Salix nigra		.′	100%	Yes	OBL		
2.						Number of Dominant Specie	es
3						That Are OBL, FACW, or FA	AC: 2 (A)
4						Total Number of Dominant	
5			100%	= Total Cover		Species Across All Strata:	2 (B)
							(-/
Sapling/Shrub Strat	tum (Plot size: 15' radiu	ıs <u>)</u>				Percent of Dominant Specie	S
1						That Are OBL, FACW, or FA	AC: 100% (A/B)
2							
3						Provolonce Index worksho	^4 ·
5.						Prevalence Index workshe	et.
•				= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plot	size: 5' radius)				OBL species 200%	x1 = 2
1. Typha angustif			95%	Yes	OBL	FACW species 3%	x2 = 0.06
2. Asclepias incar			5%	No No	OBL	FAC species	x3 =
Carex alopecoi 4.	dea		3%	No	FACW	FACU species UPL species	x4 = x5 =
5.						Column Totals: 2.03	
6.							
7						Prevalence Index =	B/A = 1.01
8							
9. 10.						Hydrophytic Vegetation In	dicators:
11.						Tryurophytic vegetation in	dicators.
12.						X 1-Rapid Test for Hy	drophytic Vegetation
13.						X 2-Dominance Test	
14						X 3-Prevalence Index	
15 16.							aptations ¹ (Provide supporting ron a separate sheet)
							phytic Vegetation ¹ (Explain)
18.							
19.						¹ Indicators of hydric soil and	wetland hydrology must
20						be present, unless disturbed	I or problematic.
			103%	= Total Cover			
Woody Vine Stratu	m (Plot size: 30' radiu	ıc \				Hydrophytic	
	III (FIOL SIZE. 30 TAUL					Vegetation	
						=	X No
				= Total Cover			
,	photo numbers here or or wed during the 2013 seas	•	.)				
, troa rias Decir IIIO		· · · · ·					

SOIL

Profile Desc	ription: (Describe to the	ne depth neede			onfirm the a	bsence of	f indicators.)	
Depth	Matrix		Red	dox Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10YR 2/1	10						peat layer
2-18	10Y 2.5/1	80	10YR 5/3	10	RM	М		gley organic layer with redox features
				· ——				
¹ Type: C=C	oncentration, D=Depletion	on, RM=Reduce	ed Matrix, CS=Covere	d or Coated	Sand Grains.	² Locati	on: PL=Pore	Lining, M=Matrix.
Hydric Soil I		•	,			Indic	ators for Pro	oblematic Hydric Soils ³ :
Histoso	l (A1)		Sandy Gleye	ed Matrix (S4)			Coas	t Prairie Redox (A16)
Histic E	pipedon (A2)		Sandy Redo	x (S5)			Iron-N	Manganese Masses (F12)
Black F	listic (A3)		Stripped Mat	trix (S6)			Dark S	Surface (S7)
Hydrog	en Sulfide (A4)		Loamy Muck	y Mineral (F1)		Very S	Shallow Dark Surface (TF12)
Stratifie	d Layers (A5)			ed Matrix (F2))		Other	r (Explain in Remarks)
	uck (A10)		x Depleted Ma					
	ed Below Dark Surface (A11)	Redox Dark		_,		3	
	Park Surface (A12)			rk Surface (F	7)			of hydrophytic vegetation and
	Mucky Mineral (S1)		x Redox Depre	essions (F8)				hydrology must be present,
	ucky Peat or Peat (S3)						uniess	s disturbed or problematic.
	.ayer (if observed):							
Type:	1 \							
Depth (i	ncnes):					Hyaric	Soil Present	? Yes <u>x</u> No
HYDROL	OGY							
Wetland Hyd	Irology Indicators:							
Primary India	cators (minimum of one i	s required: che	ck all that apply)				Secon	ndary Indicators (minimum of two required)
	Water (A1)			ed Leaves (B	9)			Surface Soil Cracks (B6)
	ater Table (A2)		Aquatic Faur	, ,				Drainage Patterns (B10)
	ion (A3)			Plants (B14)				Dry-Season Water Table (C2)
	Marks (B1)			ulfide Odor (C		- (00)		Crayfish Burrows (C8)
	ent Deposits (B2) eposits (B3)			izospheres or Reduced Iror	· ·	s (C3)		Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
	at or Crust (B4)			Reduction in		C6)		Geomorphic Position (D2)
	posits (B5)		Thin Muck S		, mod oono (4	50)		FAC-Neutral Test (D5)
	ion Visible on Aerial Ima	igery (B7)	Gauge or W					(,
Sparse	ly Vegetated Concave S	urface (B8)	Other (Expla	in in Remark	s)			
Field Observ	vations:							
Surface Wat		res No	x Depth (inches)	١٠				
Water Table		es No						
Saturation P		/es No			Wetland	Hvdrolog	y Present?	Yes X No
(includes car						,	,,	—— · · ——
	corded Data (stream gai	uge, monitoring	well, aerial photos, pr	revious inspe	ctions), if ava	ilable:		
		J	•	•				
Remarks:								
Moist gley.								

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	Port of East St. Louis-City	of East St. Louis		City/County:	East St. Lou	uis, St. Clair	Sampling Date: 9/18/2013
Applicant/Owner:	City of East St. Louis					State: IL	Sampling Point: S4
Investigator(s):	M. Goodare & M. Eldridge	!		Sect	ion, Townshi	ip, Range: S23 T2N R10W	
Landform (hillslope	, terrace, etc.): Mississipp	i river floodplain			Local r	relief (concave, convex, none):	flat
Slope (%):	Lat:			Long:			Datum:
Soil Map Unit Name	e: Urban Land (533)					NWI classi	ification: PEMC
Are climatic / hydro	logic conditions on the site ty	ypical for this time of	f year?	Yes_	x No	(If no, explain in Remark	.s.)
Are Vegetation	Y , Soil N ,	or Hydrology Y	significantly di	isturbed?	Are "No	ormal Circumstances" present?	Yes X No
Are Vegetation	N, Soil N,				•	ded, explain any answers in Rei	*
SUMMARY OF	FINDINGS Attach	site map showi	ng sampling	g point loca	tions, tra	nsects, important featu	res, etc.
Hydrophytic Vegeta	ation Present?		No	Is the	Sampled Are	ea	
Hydric Soil Present			No	within	a Wetland?	Yes>	X No
Wetland Hydrology	Present?	Yes X	No				
, ,,			rea has been m	nowed this seas	on. The are	ea drains into Wetland C. Two fi	ill roads have been placed across t
VEGETATION	Use scientific name	es of plants.	Absolute	Dominant	Indicator	<u>T</u>	
Tree Stratum (Plot	size: 30' radius)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee	t •
1. Salix nigra	,		100%	Yes	OBL	Dominianos 1000	. .
						Number of Dominant Species	s
3						That Are OBL, FACW, or FA	C: <u>2</u> (A)
4						T- tal Niverhay of Dominant	
5			100%	= Total Cover		Total Number of Dominant Species Across All Strata:	2 (B)
			100,0	- 10tal 00.0.		Opolios / 10/000 / 0.1.4	
Sapling/Shrub Strat	tum (Plot size: 15' radius)				Percent of Dominant Species That Are OBL, FACW, or FA	
3.							
4.						Prevalence Index workshee	et:
5.							
			:	= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plot 1. Typha angustife			95%	Yes	OBL	OBL species 200% FACW species 3%	x1 = 2 $x2 = 0.06$
Asclepias incar			5%	No	OBL	FAC species 578	x3 =
3. Carex alopecoi	idea		3%	No	FACW	FACU species	x4 =
4.						UPL species	x5 =
5						Column Totals: 2.03	(A) <u>2.06</u> (B)
6 7.						Prevalence Index =	B/A = 1.01
8.						i revalence index =	D/A = 1.01
9.							
10.						Hydrophytic Vegetation Inc	licators:
12.						X 1-Rapid Test for Hyd X 2-Dominance Test is	
4.4						X 3-Prevalence Index	
4.5							aptations ¹ (Provide supporting
16.							on a separate sheet)
17.						Problematic Hydrop	ohytic Vegetation ¹ (Explain)
						11. diseases of budgio poil and a	······································
19. 20.						¹ Indicators of hydric soil and be present, unless disturbed	
20			103%	= Total Cover		De present, uniess disturbed	or problematic.
Woody Vine Stratur	m (Plot size: 30' radius)				Hydrophytic	
1						Vegetation	
2				Tatal Oassa		Present? Yes	X No
				= Total Cover			
Remarks: (Include	photo numbers here or on a	a separate sheet.)					
Area has been mo	wed during the dryer summe	er season.					

SOIL

Profile Desc	ription: (Describe to the	e depth neede			onfirm the a	bsence of	indicators.)		
Depth	Matrix		Red	lox Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-2	10YR 2/1	10						peat layer	
2-18	10Y 2.5/1	80	10YR 5/3	10	RM	М		gley organic layer with red	dox features
¹ Type: C=C	oncentration, D=Depletion	on, RM=Reduce	ed Matrix, CS=Covere	d or Coated	Sand Grains.	² Locatio	n: PL=Pore L	ining, M=Matrix.	
Hydric Soil I	ndicators:	•	·			Indica	tors for Prob	elematic Hydric Soils ³ :	
Histoso	l (A1)		Sandy Gleye	d Matrix (S4))		Coast I	Prairie Redox (A16)	
Histic E	pipedon (A2)		Sandy Redox	x (S5)			Iron-Ma	anganese Masses (F12)	
Black H	listic (A3)		Stripped Mat	rix (S6)			Dark Su	urface (S7)	
Hydrog	en Sulfide (A4)		Loamy Muck	y Mineral (F1)		Very Sh	nallow Dark Surface (TF12)	
Stratifie	ed Layers (A5)		x Loamy Gleye	ed Matrix (F2))		Other (Explain in Remarks)	
2 cm M	uck (A10)		x Depleted Ma	trix (F3)					
	ed Below Dark Surface (A	A11)	Redox Dark				2		
	Park Surface (A12)		Depleted Da	-	7)			hydrophytic vegetation and	
	Mucky Mineral (S1)		x Redox Depre	essions (F8)				ydrology must be present,	
5 cm M	ucky Peat or Peat (S3)						unless	disturbed or problematic.	
Restrictive L	.ayer (if observed):								
Type:									
Depth (i	nches):					Hydric S	ioil Present?	Yes x	No
HYDROL	OGY								
_	Irology Indicators:								
	cators (minimum of one i	s required: chec						ary Indicators (minimum of t	two required)
	e Water (A1)		Water-Staine	-	9)			urface Soil Cracks (B6)	
	ater Table (A2)		Aquatic Faur					rainage Patterns (B10)	
	ion (A3)		True Aquatio					ry-Season Water Table (C2))
	Marks (B1) ent Deposits (B2)		Hydrogen Su	-	n Living Root	c (C3)		rayfish Burrows (C8) aturation Visible on Aerial In	nogon/ (CO)
	eposits (B3)		x Presence of	•	ŭ	s (C3)		tunted or Stressed Plants (D	
	lat or Crust (B4)				Tilled Soils ((C6)		eomorphic Position (D2)	71)
	posits (B5)		Thin Muck S		Tilled Collo (C	30)		AC-Neutral Test (D5)	
	tion Visible on Aerial Ima	aerv (B7)	Gauge or We					10 1104.14.1001 (20)	
	ly Vegetated Concave S	• • • •	Other (Expla		s)				
Field Observ	rations				· [
Field Observ Surface Wat		es No x	Depth (inches)	١-					
Water Table		es No x							
Saturation P		es No x			Wetland	Hydrology	/ Present?	Yes X	No
(includes car			<u> </u>			,	,	<u></u>	
· ·	corded Data (stream gau	ige, monitoring	well, aerial photos, pr	evious inspe	ctions), if ava	ilable:			
	, ,			·					
Remarks:									
Moist gley.									

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	Port of East St. Louis-City of	East St. Louis		City/County:	East St. Lou	is, St. Clair	Sampling Date: <u>9/18/2013</u>
Applicant/Owner:	City of East St. Louis					State: IL	Sampling Point: <u>S5</u>
Investigator(s):	M. Goodare & M. Eldridge			Sect	ion, Township	o, Range: S23 T2N R10W	
Landform (hillslope	terrace, etc.): Mississippi riv					elief (concave, convex, none):	flat
Slope (%):	Lat:			Long:			Datum:
Soil Map Unit Name						NWI classi	
•	logic conditions on the site typic	•		_		(If no, explain in Remarks	
Are Vegetation	<u>N</u> , Soil <u>N</u> , or h	· · · · · · · · · · · · · · · · · · ·				rmal Circumstances" present?	
Are Vegetation	N , Soil N , or h				,	ed, explain any answers in Rer	,
	FINDINGS Attach site						res, etc.
Hydrophytic Vegeta	tion Present? Ye	No	X		Sampled Are		No. V
Hydric Soil Present Wetland Hydrology	? Yesent? Ye	es X No	X	within	a Wetland?	Yes	No <u>X</u>
Remarks:	Troudine.						
S5 is representative	e of upland area around Wetlan						
VEGETATION	Use scientific names					T	
Tree Stratum (Plot	size: 30' radius)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet	
l .	Jo radius)	_	78 COVEI	opecies:	Status	Dominance Test Worksheet	
						Number of Dominant Species	3
3.						That Are OBL, FACW, or FAC	C: 0 (A)
4						Total Number of Dominant	
5				= Total Cover		Species Across All Strata:	2 (B)
		_					
Sapling/Shrub Strat	tum (Plot size: 15' radius)				Percent of Dominant Species	
\ <u></u>						That Are OBL, FACW, or FAC	C: <u>0%</u> (A/B)
2. 3.							
_						Prevalence Index workshee	t:
5.							
		_	=	= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plot 1. Festuca arundi			70%	Yes	UPL	OBL species FACW species	x1 = x2 =
Pooidaea spp.	naea	_	20%	Yes	UPL	FAC species	x3 =
3. Taraxacum offic	cinale		10%	No	FACU	FACU species 10%	x4 = 0.4
4						UPL species 90%	x5 = 4.5
5						Column Totals: 1.00	(A) 4.9 (B)
6 7.						Prevalence Index =	B/A = 4.90
8.							
9.							
10.						Hydrophytic Vegetation Ind	licators:
11 12.						1-Rapid Test for Hyd	drophytic Vegetation
13.						2-Dominance Test is	
14.						3-Prevalence Index	
15							ptations ¹ (Provide supporting
16.							on a separate sheet) hytic Vegetation ¹ (Explain)
18.						1 Toblematic Hydrop	Trytic vegetation (Explain)
19.						¹ Indicators of hydric soil and v	vetland hydrology must
20						be present, unless disturbed	or problematic.
		_	100% =	= Total Cover			
Woody Vine Stratur	m (Plot size: 30' radius)				Hydrophytic	
1.		_ ′				Vegetation	
2.						Present? Yes	No X
1		_	=	= Total Cover			
Remarks: (Include	photo numbers here or on a se	anarate cheet \				<u> </u>	
,	wed during the dryer summer s						

SOIL

Donth		iluicator or c	Ommin the	absence o	f indicators.)	
Depth Matrix	Red	dox Features				
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4 10YR 2/2 10						peat layer
4-18 10Y 3/1 80	10YR 3/6	10				gley organic layer with redox features
¹ Type: C=Concentration, D=Depletion, RM=Red	iced Matrix CS=Covere	ed or Coated	Sand Grains	² l ocati	on: PI =Pore	Lining, M=Matrix.
Hydric Soil Indicators:	acca mann, co covere	ou or ocurou	Jana Jianio			blematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleye	ed Matrix (S4)				Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redo					Manganese Masses (F12)
Black Histic (A3)	Stripped Ma	trix (S6)			Dark S	Surface (S7)
Hydrogen Sulfide (A4)	Loamy Muck	ky Mineral (F1)		Very S	Shallow Dark Surface (TF12)
Stratified Layers (A5)	x Loamy Gley	ed Matrix (F2)		Other	(Explain in Remarks)
2 cm Muck (A10)	x Depleted Ma	atrix (F3)				
x Depleted Below Dark Surface (A11)	Redox Dark	Surface (F6)				
Thick Dark Surface (A12)		ırk Surface (F	7)			of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	x Redox Depr	essions (F8)				hydrology must be present,
5 cm Mucky Peat or Peat (S3)					unless	s disturbed or problematic.
Restrictive Layer (if observed):						
Туре:						
Depth (inches):				Hydric	Soil Present	? Yes <u>x</u> No
HYDROLOGY						
HYDROLOGY Wetland Hydrology Indicators:						
	neck all that apply)				Secon	dary Indicators (minimum of two required)
Wetland Hydrology Indicators:	1. 7/	ed Leaves (B	9)			dary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl	1. 7/	•	9)			Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stain Aquatic Fau True Aquatic	na (B13) c Plants (B14)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stain Aquatic Fau True Aquatit Hydrogen St	na (B13) c Plants (B14 ulfide Odor (C) ;1)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si Oxidized Rh	na (B13) c Plants (B14 ulfide Odor (C izospheres o) :1) n Living Roo	ts (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si Oxidized Rh x Presence of	na (B13) c Plants (B14 ulfide Odor (C izospheres o Reduced Iro) c1) n Living Roo n (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si Oxidized Rh x Presence of Recent Iron	na (B13) c Plants (B14 ulfide Odor (C izospheres o Reduced Iron Reduction in) c1) n Living Roo n (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si Oxidized Rh x Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14 ulfide Odor (C izospheres o Reduced Iro Reduction in Surface (C7)) c1) n Living Roo n (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh x Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14 ulfide Odor (C izospheres o Reduced Iron Reduction in Surface (C7) ell Data (D9)) n Living Roo n (C4) Tilled Soils (Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
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WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	of East St. Lo	ouis		City/County:	East St. Lo	uis, St. Clair	Sampling Date: 9/18/2013				
Applicant/Owner: City of East St. Louis								State: IL	Sampling Point: S6		
Investigator(s): M. Goodare & M. Eldridge						Sect	ion, Townsh				
Landform (hillslope,	, terrace, etc.):	Mississipp	i river floodpla	ain			Local	relief (concave, convex, none):	flat		
Slope (%):	Lat	:				Long:			Datum:		
Soil Map Unit Name	e: Urban	Land (533)						NWI class	ification: PEMC		
Are climatic / hydrol	logic conditions	on the site ty	pical for this	time of ye	ar?	Yes	x No	(If no, explain in Remark	:s.)		
Are Vegetation											
Are Vegetation	N , Soil						(If need	ded, explain any answers in Re			
SUMMARY OF							tions, tra	nsects, important featu	res, etc.		
Hydrophytic Vegeta			Yes X					•	•		
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Yes X No											
Wetland Hydrology Present? Yes X No											
Remarks: Hydrology provided by higher water table, stormwater runoff and drainage from two other wetland areas (Wetland A and Wetland B). Area has been mowed this season. Two											
VEGETATION	Use scien	tific name	es of plant	s.				T			
Troo Stratum (Plot	cizo: 201 roc	diua \			Absolute	Dominant Species?	Indicator	Deminence Test werkehoe	4.		
Tree Stratum (Plot 1. Salix nigra	size: 30' rac	ilus)			% Cover 100%	Species? Yes	Status OBL	Dominance Test workshee	t:		
_					10070	103	OBL	Number of Dominant Specie	s		
3.								That Are OBL, FACW, or FA			
4.				,							
5.								Total Number of Dominant			
					100%	= Total Cover		Species Across All Strata:	(B)		
2.								Percent of Dominant Specie That Are OBL, FACW, or FA			
4.								Prevalence Index workshee	et:		
5.											
						= Total Cover		Total % Cover of:	Multiply by:		
Herb Stratum (Plot		us)				.,		OBL species 200%			
 Typha angustife Asclepias incar 					95% 5%	Yes No	OBL OBL	FACW species 3% FAC species	x2 = 0.06 x3 =		
3. Carex alopecoi					3%	No	FACW	FACU species	x4 =		
4.					-			UPL species	x5 =		
5.								Column Totals: 2.03	(A) 2.06 (B)		
6											
7								Prevalence Index =	B/A = 1.01		
8. 9.											
10.								Hydrophytic Vegetation Inc	dicators:		
11.											
12.								X 1-Rapid Test for Hy	drophytic Vegetation		
13.								X 2-Dominance Test i			
14.								X 3-Prevalence Index	is ≤3.0° aptations¹ (Provide supporting		
15. 16.									on a separate sheet)		
17.									phytic Vegetation ¹ (Explain)		
18.					-						
19.								¹ Indicators of hydric soil and	wetland hydrology must		
20.								be present, unless disturbed	or problematic.		
					103%	= Total Cover					
Woody Vine Stratur	m (Plot sizo:	30' radius	١					Hydrophytic			
1.	_ `							Vegetation			
2.								=	X No		
						= Total Cover			_		
Remarks: (Include Area has been mo	•		•	eet.)							

SOIL

Profile Desc	ription: (Describe to the	ne depth neede	d to document the in	dicator or co	onfirm the a	bsence of	indicators.)					
Depth	Matrix		Red	ox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks				
0-2	10YR 2/1	10						peat layer				
2-18	10Y 2.5/1	80	10YR 5/3	10	RM	М		gley organic layer with redox features				
17	tertion B. Benteti	- DM Dadas	- I Matrice OO Oasses	d O (- d)	2	21 1	DI D	Linda o NA NACIO				
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.												
_	Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16)											
	pipedon (A2)		Sandy Redox				Iron-Manganese Masses (F12)					
	listic (A3)		Stripped Mat				Dark Surface (S7)					
	en Sulfide (A4)		Loamy Muck)		Very Shallow Dark Surface (TF12)					
	ed Layers (A5)		x Loamy Gleye	-	-		Other (Explain in Remarks)					
	uck (A10)		x Depleted Ma		(
	ed Below Dark Surface (A11)	Redox Dark	. ,								
	ark Surface (A12)	,	Depleted Dar	, ,	7)		³ Indicators of hydrophytic vegetation and					
	Mucky Mineral (S1)		x Redox Depre	-	,		wetland hydrology must be present,					
5 cm M	ucky Peat or Peat (S3)						unless disturbed or problematic.					
Restrictive L	ayer (if observed):											
Type:	, 6. (666. 16).											
Depth (i	nches):					Hydric S	Soil Present	? Yes x No				
Remarks:												
HYDROL	OGY											
Wetland Hyd	Irology Indicators:											
Primary Indic	cators (minimum of one	is required: chec	k all that apply)				Secor	ndary Indicators (minimum of two required)				
Surface	Water (A1)		Water-Staine	ed Leaves (B9	9)		Surface Soil Cracks (B6)					
x High W	ater Table (A2)		x Aquatic Faur	na (B13)			x Drainage Patterns (B10)					
Saturation (A3)			True Aquatic				Dry-Season Water Table (C2)					
Water N	Marks (B1)		Hydrogen Su	Ifide Odor (C	1)			Crayfish Burrows (C8)				
	ent Deposits (B2)		Oxidized Rhi	•	-	s (C3)		Saturation Visible on Aerial Imagery (C9)				
	posits (B3)		x Presence of		. ,			Stunted or Stressed Plants (D1)				
	at or Crust (B4)	Recent Iron F		Tilled Soils (C6)		Geomorphic Position (D2)					
	posits (B5)	(DZ)	Thin Muck Surface (C7) FAC-Neutral Test (D5) Gauge or Well Data (D9)									
	ion Visible on Aerial Ima			-\								
Sparse	y Vegetated Concave S	ourrace (Bo)	Other (Explai	in in Kemarks	5)							
Field Observ	rations:											
Surface Wat	er Present?	Yes No x	_ ' '	:								
Water Table		Yes No x										
Saturation P		Yes No _x	Depth (inches)	:	Wetland	Hydrolog	y Present?	Yes X No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Describe Re	corded Data (stream ga	uge, monitoring	well, aerial photos, pr	evious inspec	ctions), if ava	allable:						
Remarks:	acil challe procent within	Wotland C										
wioist giey. Sf	ail shells present within	vvelianu C.										